

# SYNONYMICAL DATA: DESCRIPTIONS OF NEW HYDROMETRIDAE (HEMIPTERA)

By Carl J. Drake, Ames Iowa

The present paper contains the descriptions of two new species of *Hydrometra* from Peru. The notes and synonymical data on types are based largely upon specimens in the British Museum (Nat. Hist.) and University of Glasgow. I am indebted to Dr. W. E. China of the above Museum for the privilege of studying the types of a number of American water-striders. The types of the new species are in my personal collection.

## HYDROMETRA ARGENTINA Berg

- 1879 *Hydrometra argentina* Berg, Hem. Arg. p. 184 (orig. desc.).
- 1879 *Hydrometra mensor* B. White, Trans. Ent. Soc. London P. 267 (new synonymy).
- 1896 *Hydrometra argentina* Lethierry et Severin, Cat. gen. Hem. Het. 3:54
- 1896 *Hydrometra mensor* Lethierry et Severin, op. cit. p. 54.
- 1898 *Hydrometra mensor* Champion, Biol. Centr.-Amer. Rhyn. 2:124-125 (in part; specimen from Santarem, only).
- 1901 *Limnometra chilensis* Reed, Rev. Chil nat. 5:197 (reprint, p. 103)
- 1909 *Hydrometra argentina* Kirkaldy et Torre-Bueno, Proc. Ent. Soc. Wash. 10(2-3):213 (list.)
- 1909 *Hydrometra mensor* Kirkaldy et Torre-Bueno, op. cit. p. 214 (list).
- 1921 *Hydrometra argentina* Pennington, Lista Hem. Het. Rep. Arg. pt. 2, p. 31.
- 1926 *Hydrometra mensor* Torre-Bueno, Entom. Amer. 7(2):100 & 104-105.
- 1926 *Hydrometra kirkaldyana* Torre-Bueno, op. cit. pp. 101 & 104-105.
- 1926 *Hydrometra husseyi* Torre-Bueno, op. cit. p. 102 & 111-113.
- 1926 *Hydrometra argentina* Torre-Bueno, op. cit. pp. 125-126.
- 1926 *Hydrometra chilensis* Torre-Bueno, op. cit. p. 126.
- 1934 *Hydrometra kirkaldyana* Hungerford et Evans, Ann. Mus. nat. Hung. 27:10.
- 1934 *Hydrometra mensor* Hungerford et Evans, op. cit. pp. 92, 103 & 105.
- 1934 *Hydrometra husseyi* Hungerford et Evans, op. cit. pp. 92 & 105, pl. 12 (3 figs.)
- 1934 *Hydrometra argentina* Hungerford et Evans, cit. p. 107 (list).
- 1934 *Hydrometra chilensis* Hungerford et Evans, op. cit. p. 107 (list).
- 1953 *Hydrometra argentina* Drake, J. Kan. Ent. Soc. 26(1):40-41 (synonymizes *H. chilensis* (Reed), *H. husseyi* Torre-Bueno and *H. kirkaldyana* Torre-Bueno with *H. argentina*).

*H. argentina* Berg is a common and very widely dispersed marsh-treader, ranging from Trinidad, B.W.I., and Panama south far into Argentina and Chile. It is more agile and active than its North American congeners.

After studying the types of *H. mensor* Buchanan-White (Univ. of Glasgow) and *H. argentina* Berg (La Plata Mus., Aug.), I find that the two are identical species and thus synonyms (NEW SYNONYMY). As the original description of *H. argentina* was published

first in the July 1879 issue of Anal. Soc. Cien. Arg. 8(1):23 (reprinted in Dec., 1879, in the collected volume "Hemiptera-Argentina," p. 189) and that of *H. mensor* Buchanan-White in Dec., 1879, in Trans. Ent. Soc. Lond., p. 267, the former name thus has priority by several months. For a discussion of other synonymies and notes on distribution, see the article by Drake (1953, op. cit. pp. 40-41).

#### HYDROMETRA NAIADES Kirkaldy

- 1909 *Hydrometra mensor* Champion, Biol. Centr.-Amer. Rhyn. 2:124 & 125-126 (in part; female specimen, David, Panama).  
 1902 *Hydrometra naiades* Kirkaldy, Entomologist, 25:281 (n. n. for *H. mensor* Champion, nec B.-White).  
 1909 *Hydrometra naiades* Kirkaldy et Torre-Bueno, Proc. Ent. Soc. Wash. 10(3-4): 214 (list; Panama).  
 1926 *Hydrometra naiades* Torre-Bueno, Ent. Amer. 7(2):117 (in part; desc. and notes should be referred to *H. australis* Say).  
 1934 *Hydrometra naiades* Hungerford et Evans, Ann. Mus. Nat. Hung. 28:107 (list of Amer. spp. *Hydrometra*).

The following notes are based upon the female type in British Museum, and are intended to supplement the original description (Champion 1898, p. 125). Anteocular part of head less than twice as long as postocular (78:41); clypeus narrow, nearly twice as long at base as median length, with apex bluntly rounded. Rostrum very long, with apex extending beyond the eyes to the basal fourth of postocular part of head. Antennae dark brownish fuscous with apical half of first segment blackish, measurements—I, 16; II, 35; III, 70; IV, 40. Pronotum 1.55 mm. long; anterior lobe impunctate, save for the encircling row of rather shallow pits just behind collar; hind lobe with a number of large shallow pits (not very numerous). Hemelytra (brachypterous) strap-like, fuscous, barely extending beyond metanotum. Hind femora 3.50 mm. long, extending to middle of sixth abdominal segment. Middle and fore acetabula with four pits (each), two in front of a cleft and two behind it; hind acetabula without pits.

This species is known only from the type. Torre-Bueno (1926, p. 117) wrongly described the female of *H. australis* Say as *naiades*. As *H. myrae* Torre-Bueno is a synonym of *australis*, his comments therefore should be referred to *australis*. The lone specimen recorded from Santarem, Brazil, by Champion (1898, pp. 125-126) is the true *H. mensor* B.-White and inseparable from *H. argentina* Berg.

#### HYDROMETRA METATOR B. White (Figs. 1-4)

- Hydrometra metator* B.-White, J. Linn. Soc. Lond. (Zool. Hung. 28:93-94. 1934.  
*Hydrometra metator* Hungerford et Evans, Ann. Mus. Zool. Hung. 28:93-1934.  
*Hydrometra metator* Costa-Lima, Ins. Bras. Hem. 2:296. 1942.

While I was studying Hemiptera at the British Museum last summer (1953), Dr. W. E. China kindly borrowed the male type of *H. metator* B.-White from the University of Glasgow. In order to expose fully the male processes and acetabular pits, the specimen was floated off the rectangular card and carefully cleaned. These structures were then illustrated by Mr. Arthur Smith, Artist, of the above museum (figs. 1-4).

As can be observed in the illustrations (figs. 2-4), the anterior acetabula have two pits in front of a cleft and one behind it; middle acetabula one in front of a cleft and three behind it; and hind acetabula nine pits. The pits are small and were not plainly visible until after the waxy secretions and glue had been removed. The male processes (fig. 1) of the seventh ventrite were figured at an oblique ventral angle of about 40 degrees. From this angle the left male process could be drawn from ventral aspect so as to show size, form and position on segment as well as arrangement and density of bristly hairs around the rim, and the right process from almost lateral aspect. The above structures were wrongly described by Hungerford and Evans, *op. cit.*, p. 93. *Metator* is a very distinct species and known only from the type.

#### HYDROMETRA CARAIBA Guerin-Meneville

1856 *Hydrometra caraiba* Guerin-Meneville, in Sagra's Cuba Ins. 7(2): 173.

1896 *Gerris caraiba* Lethierry et Severin, Cat. gen. Hem. Het. 3:60.

1898 *Hydrometra caraiba* Champion, Biol. Centr.-Amer. Rhyn. 2:124.

1926 *Hydrometra caraiba* Torre-Bueno, Ent. Amer. NS7(2):101 & 113-114.

1926 *Hydrometra championi* Torre-Bueno, *op. cit.* pp. 103 & 119-120. (NEW SYNONYMY)

1934 *Hydrometra caraiba* Hungerford and Evans, Ann. Mus. Nat. Hung. 28:91 & 94, 2 figs.

1934 *Hydrometra championiana* Hungerford and Evans, *op. cit.* pp. 91 & 94, 2 figs.

Ever since Torre-Bueno (1926, p. 119) proposed the name *H. championiana* for the species Champion (1898, p. 124) called *caraiba*, there has been constant confusion relative to these names. As the types of *H. championiana* are in the British Museum (Nat. Hist.), Torre-Bueno's notes and redescription of *championiana* were based entirely upon specimens so determined by him from Guatemala (Gaulan) and Colombia (Rio Frio). In other collections Torre-Bueno also determined *H. zeteki* Drake and *H. acapulcana* Drake as *championiana*.

During the past summer (1953) I studied the types of *H. championiana* in the British Museum. As these specimens do not differ specifically from specimens of *H. caraiba* from Cuba, Haiti

and Central America, *championiana* is here placed in synonymy (NEW SYNONYMY). Specimens of *H. caraiba* have been examined from Mexico, Honduras, Panama, Guatamala, Colombia, Venezuela, British Guiana, Cuba, and Haiti.

**HYDROMETRA FUANUCANA** Drake, n. sp.

Long, rather slender, brown with hemelytra dark fuscous. Head blackish fuscous with base brown, moderately enlarged at apex, 4.60 mm. long, with ventral interocular groove short and shallow, the anteocular part nearly three times as long as postocular (63:22). Rostrum pale brown, with apex extending between eyes. Antennae fuscous, long; first segment moderately incrassate, black-fuscous, shining, narrowly embrowned at base; measurements—I, 13; II, 19; III, 95; IV, 41. Legs very long, fuscous with tibiae mostly brownish; anterior femora a little longer than the head; hind femora much longer than the abdomen (140:105).

Pronotum with front lobe about one-half as long and hind part, impunctate save for the transverse row of moderately large pits just back of the narrow collar; hind lobe with median longitudinal frosted line impressed and beset with a row of pits, surface on each side of median line with very many deep, rather small pits not arranged in regular rows, the pits on hind lobe slightly smaller than those behind collar. All acetabula deeply pitted; anterior acetabula with 9-10 pits in front of a cleft and 12-13 behind it; middle acetabula with 9-13 pits in front of a cleft and 12-13 back of it; hind acetabula with 15-17 pits; propleura with 12-15 pits, arranged in a long basal row and either one or two short rows above it. Abdomen with first six tergites smooth, black, shining, the seventh tergite brownish and roughened with small spinulae; connexivum blackish fuscous, brownish on median line. Hemelytra extending nearly to the middle of sixth tergite, dark fuscous with a couple pale streaks.

Male: Seventh ventrite with rounded processes (one on each side) which are situated just behind the middle of segment, each process beset with moderately long, stiff, black hairs (thick in basal half and then only a few on rim of posterior part), distance between processes about equal to the diameter of one of them, surface not impressed within processes, the latter not extending to hind border of segment; eighth ventrite deeply broadly impressed on each side, with a broad median smooth ridge between impression, with a few scattered pale hairs in posterior part of each impression, with several much longer hairs behind each impression.

Female: Seventh tergite elevated backwards, with small tufts of hairs (one on each side) on hind margin; eighth tergite slowly narrowed and sloping downward posteriorly, suddenly narrowed behind and terminating in a sharp point.

Length, 13.75-15.00 mm.

*Type* (male) and *allotype* (female), both macropterous, "Cu-charos," Dept. of Faunuco, on small ponds near the bank of River Huallago, Peru, August, 1954. *Paratypes*: 4 specimens, taken with type.

HYDROMETRA **HUALLAGANA** Drake, n. sp.

Long, rather slender, brownish fuscous. Head fuscous-black with basal part brown, moderately widened in front; anteocular part three times as long as postocular (65:22); ventral ocular groove shallow, not longer than an eye; clypeus dark reddish brown, shining, slightly longer than wide, obtusely angulate in front; rostrum brownish with apex dark fuscous, scarcely extending beyond front margins of eyes. Antennae very long, fuscous; first segment blackish with brownish base, shining, moderately swollen; measurements—I, 28; II, 64; III, 210; IV, 85. Legs very long, fuscous; anterior femora extending beyond apex of clypeus; hind femora much longer than abdomen (155:120).

Pronotum 2.50 mm. long, with the median longitudinal line extending from base almost to collar; anterior lobe about one-half as long as hind, with an encircling row of moderately large deep pits just behind narrow collar, otherwise impunctate, even in frosted median line; hind lobe with a row of pits in frosted line, with very many, rather small, deep and very distinct pits on each side of median line. All acetabula with numerous deep pits, which are a little larger than ones on hind pronotal lobe; fore acetabula with 7-8 pits in front of a cleft and 9-11 behind it; middle acetabula with 7-11 pits in front of a cleft and 10-11 behind it; hind acetabula with 15-18 pits; propleura with 8-12 pits, arranged in a long basal and one or two shorter rows. Abdomen with first six tergites greyish black-fuscous, smooth, shining, the seventh tergite roughened with spinulae; connexiva dark fuscous with broad, median, brown stripe; venter dark fuscous, the sterna brownish. Hemelytra (brachypterous) extending a little beyond base of abdomen, brownish with raised veins dark fuscous, (macropterous) extending to base of seventh tergite, brown with broad median stripe dark fuscous, usually much paler on each side of stripe.

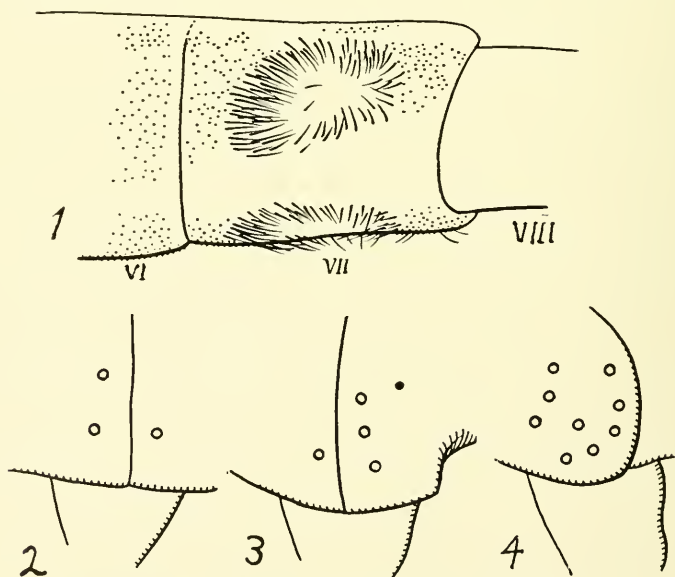


Male: Abdomen with six, seventh and eighth ventrites sparsely clothed with long pale hairs; seventh ventrite with a large, impressed, apical area (one on each side) extending from a little in front of middle almost to apex of segment), densely bordered in front and thinner on the exterior side with long, stiff, black hairs, the inner side and behind open, almost without hairs, the surface within process sparsely clothed with very short, pale hairs and lightly frosted; eighth ventrite quite deeply broadly impressed on each side, without a prominent median ridge, somewhat frosted; eighth tergite terminating behind in a slightly upturned, pointed process. Female: Seventh tergite raised backwards; eighth tergite narrowed and sloping downwards, terminating posteriorly in a sharp point.

Length, 14.00-16.00 mm.

*Type* (macropterous male) and *allotype* (brachypterous female), "Cucharos" Dept. of Faunuco, River Huallago, in boggy ponds on bank, Peru, August, 1954. *Paratypes* 4 examples, taken with type.

Probably most closely allied to *H. williamsi* Hungerford and Evans, but readily separated from it by number of pits in acetabula. The male processes are somewhat similar in the two species.



*Hydrometra metator* B. White (male type).  
Fig. 1, 7th ventrite showing male processes.  
Fig. 2, fore acetabula showing pits. Fig. 3, middle acetabula. Fig. 4, posterior acetabula.